

# XPERIA™ mini pro



SK17, SK17i

# Purpose of this document

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Sony Ericsson product White papers are intended to give an overview of a product and provide details in relevant areas of technology.

## Document history

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### Version

June 2011	Second released version	Version 2
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# Sony Ericsson Developer World

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This White paper is published by:

Sony Ericsson Mobile Communications AB,  
SE-221 88 Lund, Sweden

[www.sonyericsson.com](http://www.sonyericsson.com)

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Second released version (June 2011)  
Publication number: 1249-3432.1

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# Product overview

## Xperia™ mini pro – Start spreading the news

Finally off on that New York weekend? You want to write about it, right? It's fast and easy too. Just slide out the keyboard and start typing. The Type & Send widget takes care of the rest without you opening masses of apps. The Smart Keyboard feature knows where you're at. Read a mail? Slide out and reply direct. Looking for answers? Type directly in Google™ search.

### **Shoot the video in HD. Share it. Then bask in the limelight**

Capture the volley in sharp HD. Shoot the player with the 5 megapixel auto focus camera. Getting dark? The photo flash catches those beautiful details. Now show your masterpieces in high contrast on the Reality Display with Mobile BRAVIA® ENGINE. Life looks brighter through a large, 3-inch scratch-resistant multi-touch mineral glass screen.

### **Do the business. From everywhere**

On the move? On call? Or on the beach? Sync your email and calendar on the fly with Exchange ActiveSync®. And with OfficeSuite loaded as standard, you'll look smooth over your smoothie as you prepare for that perfect pitch. With the powerful 1 GHz processor you can thumb your way through everything lightning fast.

### **One touch to everything**

Get to where you want to in a flash. Take your favourite apps. Group four of them in each of the four corners of your Home screen. Then use what you want with one hand while you fix your hair with the other. Xperia™ mini pro is loaded with lots of goodies from Google™ with a whole lot more on Android Market™. Over 150,000 more actually.

### **Facebook™ inside Xperia™**

Don't forget anyone's birthday. With Facebook™ inside Xperia™, you get all your friends' birthdays directly in your calendar. Share status, likes, recommendations and more from the music player and photo gallery. Put the Music and Video Discovery widget on your Home screen and see all your Facebook™ friends' latest music and video recommendations. View the video. Then "like" it. Instant enjoyment.



# Facts – dimensions, weight, performance and networks

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<b>Operating system</b>	Google™ Android™ 2.3 (Gingerbread)
<b>Processor</b>	1 GHz Qualcomm Snapdragon™ MSM8255
<b>Size</b>	92 x 53 x 18 mm
<b>Weight</b>	136 grams
<b>Available colours</b>	Black/Turquoise White/Pink
<b>Main screen</b>	
Colours	16,777,216 colour TFT
Resolution	480x320 pixels
Size (diagonal)	3 inches
Scratch resistant	Yes – Mineral glass
<b>Input mechanisms</b>	
QWERTY keyboard	4x11
Text input	Quick text (Zi), On-screen QWERTY keyboard
Touch screen	Capacitive (multi-touch, 4-point)
Touch gesture	Yes – Multi-touch
Handwriting recognition	Yes – Chinese input only
<b>Memory</b>	
Internal phone storage	Up to 320 MB user-free memory
RAM	512 MB
Expansion slot	microSD™, up to 32 GB
<b>Camera</b>	
Camera resolution	5 megapixel
Front-facing camera	Yes
Digital zoom	8x
Photo flash	Yes – LED
Video recording	Yes – HD 720p
<b>Sensors</b>	
Accelerometer	Yes
Ambient light sensor	Yes
Magnetometer	Yes

Proximity sensor	Yes
<b>Networks</b>	
SK17	UMTS HSPA 850 (Band V), 1900 (Band II), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
SK17i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
<b>Data transfer speeds</b>	
GSM GPRS	Up to 80 kbps (download). Up to 20 kbps (upload)
GSM EDGE	Up to 237 kbps (download). Up to 59 kbps (upload)
UMTS HSPA cat 6 (upload)	Up to 5.76 Mbps
UMTS HSPA cat 8 (download)	Up to 7.2 Mbps
<b>Talk time (GSM)</b>	5 hours 40 min*
<b>Standby time (GSM)</b>	331 hours*
<b>Talk time (UMTS)</b>	5 hours 25 min*
<b>Standby time (UMTS)</b>	340 hours*
<b>Music listening time</b>	29 hours
<b>Video playback time</b>	5 hours 45 min
<b>Battery</b>	1200 mAh

\* Values are according to GSM Association Battery Life Measurement Technique.

Note: Battery performance may vary depending on network conditions and configurations, and phone usage.

## Application overview list

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### Sony Ericsson signature applications

Sony Ericsson Home screen application

Sony Ericsson Music Player

Sony Ericsson Timescape™

### Sony Ericsson services

PlayNow™ service\*

TrackID™ application

Sony Ericsson Sync

### Other applications

Facebook™\*

Microsoft® Exchange ActiveSync® support with Moxier client

Wisepilot™\*

\* The service is not available in all markets.

# Full feature list

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## 1. Signature features

### Sony Ericsson Timescape™

#### The place to meet your friends

The Timescape™ application manages all your communication with one person in one place. Browse through your conversations the bright way to check out your Facebook™, Twitter™, photos, emails, and texts. Now they're all kept together so you don't have to open loads of different applications to see what's going on.

### Infinite button

#### Everything you want – from everywhere

Find out all about your friends in a flash. Press the infinite button in the Timescape™ application and smart filter everything that's going on with each person.

### Sony Ericsson Sync

#### Make your mobile life available on the web

Synchronise your phone data with Sony Ericsson Sync. Match your phone contacts with your contacts on Facebook™. All your synchronised phone data is right at your fingertips – in your account on [www.sony-ericsson.com](http://www.sony-ericsson.com).

### Sony Ericsson Local connectivity

#### A great experience for transferring media files

Transfer your media files in an easy way. Using Sony Ericsson Local connectivity, you can choose between USB mass-storage device class (MSC) mode and Media Transfer Protocol (MTP) mode. Choose MSC mode if you want to have absolute control of the storage or choose MTP mode if you want to transfer media files without risk of data corruption. Experience more with MTP using a USB cable.

### Sony Ericsson Home screen application

#### Your Home screen – just like home

Where's best for you? Email top right? Music player bottom left? You decide. Put your favourites within thumb's reach. Messages. Calls. Web. Music. YouTube™\*\*. Your favourite apps from Android Market™\* or from the PlayNow™ service\*\*. What you want, where you want.

*\* Applications from Android Market™ vary widely in size, from less than 100 KB for small utilities to 3-4 MB for full games, music player applications, or other major offerings. The average size, if a representative selection of useful and fun applications is selected, is about 1 MB. This means that, on average, more than 100 applications can be downloaded and used on your device without negatively impacting performance. With the ready availability of the Android Market™ application in the phone, it is also very easy to delete and later reinstall infrequently used applications.*

*\*\* This service is not available in all markets.*

## 2. Categorised features

 <p><b>Camera</b></p> <ul style="list-style-type: none"> <li>5 megapixel camera</li> <li>8x digital zoom</li> <li>Auto focus</li> <li>Face detection</li> <li>Face recognition</li> <li>Flash/LED</li> <li>Front-facing camera (VGA)</li> <li>Geo tagging</li> <li>HD video recording (720p)</li> <li>Image stabiliser</li> <li>Red-eye reduction</li> <li>Scene detection</li> <li>Self-timer</li> <li>Send to web</li> <li>Smile detection</li> <li>Touch capture</li> <li>Touch focus</li> <li>Video light</li> <li>Video recording</li> <li>Video stabiliser</li> </ul>	 <p><b>Music</b></p> <ul style="list-style-type: none"> <li>Album art</li> <li>Bluetooth™ stereo (A2DP)</li> <li>Music tones (MP3/AAC)</li> <li>*PlayNow™ service**</li> <li>Sony Ericsson Music Player</li> <li>TrackID™ music recognition</li> <li>xLOUD™</li> </ul>	 <p><b>Internet</b></p> <ul style="list-style-type: none"> <li>*Android Market™**</li> <li>Bookmarks</li> <li>Google™ search</li> <li>Google Voice™ Search**</li> <li>NeoReader™ barcode scanner</li> <li>Pan &amp; zoom</li> <li>Web browser (WebKit)</li> </ul>
 <p><b>Communication</b></p> <ul style="list-style-type: none"> <li>Call list</li> <li>Conference calls</li> <li>Facebook™ application**</li> <li>Google Talk™</li> <li>Noise Shield</li> <li>Polyphonic ringtones</li> <li>Sony Ericsson Timescape™</li> <li>Speakerphone</li> <li>Twitter™ (Timescape™ integration)**</li> <li>Vibrating alert</li> <li>Video chat ready</li> </ul>	 <p><b>Messaging</b></p> <ul style="list-style-type: none"> <li>Conversations</li> <li>Email</li> <li>Google Mail™</li> <li>Handwriting recognition***</li> <li>Instant messaging</li> <li>Multimedia messaging (MMS)</li> <li>Predictive text input</li> <li>Sound recorder</li> <li>Text messaging (SMS)</li> <li>Type &amp; Send widget</li> </ul>	 <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Auto rotate</li> <li>Four-corner Home screen</li> <li>Keyboard (on-screen, 12-key)</li> <li>Keyboard (Hardware, QWERTY)</li> <li>Keyboard (on-screen, QWERTY)</li> <li>Picture wallpaper</li> <li>Reality Display with Mobile BRAVIA® ENGINE</li> <li>Smart Keyboard</li> <li>Touchscreen</li> <li>Live wallpaper</li> </ul>

\* Applications from Android Market™ vary widely in size, from less than 100 KB for small utilities to 3-4 MB for full games, music player applications, or other major offerings. The average size, if a representative selection of useful and fun applications is selected, is about 1 MB. This means that, on average, more than 100 applications can be downloaded and used on your device without negatively impacting performance. With the ready availability of Android Market™ application in the phone, it is also very easy to delete and later reinstall infrequently used applications.

\*\* This service is not available in all markets.

\*\*\*\* Chinese input only

 <p><b>Entertainment</b></p> <ul style="list-style-type: none"> <li>3D games</li> <li>Media browser</li> <li>Radio (FM radio with RDS)</li> <li>Video streaming</li> <li>YouTube™*</li> </ul>	 <p><b>Organiser</b></p> <ul style="list-style-type: none"> <li>Alarm clock</li> <li>Calculator</li> <li>Calendar</li> <li>Document readers</li> <li>Emanual</li> <li>Flight mode</li> <li>Google Calendar™</li> <li>Google Gallery™ 3D</li> <li>Infinite button</li> <li>Phonebook</li> <li>Setup guide</li> <li>Widget manager</li> </ul>	 <p><b>Connectivity</b></p> <ul style="list-style-type: none"> <li>3.5 mm audio jack</li> <li>aGPS*</li> <li>Bluetooth™ technology</li> <li>DLNA Certified™</li> <li>Google Latitude™*</li> <li>Google Maps™ with Street View*</li> <li>Media Transfer Protocol support</li> <li>Micro USB support</li> <li>Modem</li> <li>Native USB tethering</li> <li>Synchronisation via Facebook™*</li> <li>Synchronisation via Google™ Sync*</li> <li>Synchronisation via Sony Ericsson Sync</li> <li>Synchronisation: Microsoft® Exchange ActiveSync®</li> <li>Synchronisation: Microsoft® Exchange ActiveSync® via Moxier client*</li> <li>USB mass storage</li> <li>USB High speed 2.0 support</li> <li>Wisepilot™*</li> <li>Wi-Fi®</li> <li>Wi-Fi® Hotspot functionallity</li> </ul>
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\* This service is not available in all markets.

# Technologies in detail

**NOTE:** The information outlined below is general, and levels of compliance to standards and specifications may vary between products and markets. For more information, contact Sony Ericsson Developer World or your Sony Ericsson contact person where applicable.

## Device-to-device communications (local)

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### Bluetooth wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile v1.2 Audio/Video Remote Control Profile v.1.0 Handsfree Profile v1.5 Headset Profile v1.1 Object Push Profile v1.1 Phonebook Access Profile v1.0
Core version and supported core features	Advanced Audio 2.1 + EDR
Connectable devices	Products supporting at least one of the profiles above

More information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

[www.bluetooth.com](http://www.bluetooth.com)

## Wi-Fi®

Supported standards	IEEE 802.11b/g/n and Wi-Fi®
Connectable devices	Wi-Fi® access points
Frequency band	2.4 GHz
Data transfer rate	Up to 72 Mbps
Security	WEP 64 bit WEP 128 bit TKIP CCMP (AES) Open Authentication Shared Authentication EAP-TLS EAP-TTLS/MSCHAPv2 PEAPv0/EAP-MSCHAPv2 PEAPv1/EAP-GTC WPA Personal and WPA2 Personal WPA Enterprise and WPA2 Enterprise
Encryption	WEP, TKIP and AES
Power save	WMM-UAPSD QoS, WMM

**DLNA (Digital Living Home Alliance) Certified™**

Supported Device Classes	M-DMS – Mobile Digital Media Server Media Types: Images Summary: The digital media server exposes the media files in your phone to a Wi-Fi® network. The media files can then be accessed from other DLNA Certified™ clients.
Supported Bearers	Wi-Fi®
DRM Support	The Sony Ericsson DLNA Certified™ implementation does not support DRM-protected content

# Messaging

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## MMS (Multimedia Messaging Service)

MMS 1.0 is supported.

## Email

Bearer type (IP)	GPRS, EGPRS, UMTS
Character sets	BIG5 Traditional Chinese GB2312 Simplified Chinese ISO-2022-JP Japanese ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO 8859-11 KOI8-R Cyrillic Shift_JIS Japanese USASCII UTF-16 UTF-8 Windows® 874 Windows® 1251 Cyrillic Windows® 1252 Windows® 1254 Turkish Windows® 1258 Vietnamese
Protocols	POP3 and IMAP4
Push email	Microsoft® Exchange ActiveSync® (EAS)
Secure email	SSL/TLS, both port methods (POPS/IMAPS) and START-TLS
HTML mail	Yes (read only)

### More information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

[www.openmobilealliance.org](http://www.openmobilealliance.org)

## Positioning – location based services

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Supported standards:

OMA Secure User Plane Location (SUPL) v1.0

3GPP™ Control Plane location (incl. Emergency location)

Qualcomm® GPSOneXtra

## Provisioning (OMA CP)

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OMA CP version 1.1

## Multimedia (audio, image and video)

<b>Audio Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	Audio decoding MPEG-1/2/2.5, audio layer 3	MP3 (.mp3), 3GPP (.3gp); MP4 (.mp4, .m4a)
	AAC, AAC+, eAAC+	3GPP (.3gp) MP4 (.mp4)
	AMR-NB, AMR-WB	3GPP (.3gp) MP4 (.mp4)
	General MIDI (GM)	SMF (.mid)
	Linear PCM 16bit	WAV (.wav)
	OTA	OTA (.ota)
	Ogg vorbis	Ogg vorbis (.ogg)
<b>Audio Recording</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	AMR-NB, AMR-WB	3GPP (.3gp), MP4 (.mp4), AMR(.amr)
	AMR-NB, AMR-WB, AAC-LC stereo, sample rate 48 kHz bit rate 128 kbps	3GPP (.3gp), MP4 (.mp4)
<b>Image Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	1, 4, 8, 16, 24 and 32 bpp and RLE encoded formats	BMP (.bmp)
	Single and multi-frame, bitmap mask support (GIF87a format and GIF89a format)	GIF (.gif)
	Joint Photographic Experts Group	JPEG (.jpg)
	Portable Network Graphics Bitmap mask support	PNG (.png)
	Wireless Bitmap	WBMP (.wbmp)
<b>Image Capture</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	Joint Photographic Experts Group	JPEG (.jpg)
<b>Video Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	MPEG-4 Visual Simple Profile, Advanced Simple Profile Level 6	3GPP (.3gp); MP4 (.mp4)
	H.264 High Profile Level 3.1	3GPP (.3gp); MP4 (.mp4)
	H.263 Profile 0, Profile 3 Level 70	3GPP (.3gp)

<b>Video Recording</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	Video H.263 Profile 0, H.264 Baseline Profile Audio: AAC-LC stereo, sample rate 48 kHz bit rate 128 kbps, AMR-NB	3GPP (.3gp), MP4 (.mp4)
<b>Audio/Video Streaming</b>	Streaming transportF	RTSP according to 3GPP™ HTTP streaming
<b>DRM</b>	DRM (Digital Rights Management) – features the rights and copy protection of downloaded content	OMA DRM 1.0

## Synchronisation (OMA DS, EAS, Google Sync™)

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OMA Data Synchronisation protocol versions 1.1.2 and 1.2.

OMA Data Formats: vCard 2.1, vCalendar 1.0.

Microsoft® Exchange ActiveSync® protocol version 2.5

Microsoft® Exchange ActiveSync® protocol version 12

Google Sync™

Related information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

## Web browser

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Browser version	Android 2.3 Browser (Based on WebKit)
Navigation/rendering	Pan & Zoom Landscape/portrait rendering Full page PC rendering Adobe™ Flash™ 10.1*
Search	Internet Search
Browser compliancy	HTML version 4.0 HTML version 5.0 XHTML Basic version 1.0 XHTML 1.1 CSS 2.0 CSS 2.1 CSS 3.0 JavaScript 1.7/ECMA-script 262 3rd edition DOM 2.0 DOM 3.0
Supported Device API	Geo-location API
Protocol compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 Gzip OMA Download 1.0

\* Updates are distributed via Android market.

Related information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

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